

CLAIMS

1. A method of connecting the outer end of a passenger bridge (4) to a door on an aircraft body, said door (A3-A5;A8,A9) being located on one side of the aircraft and
5 sternwards of the aircraft wing (6), wherein the inner part (7) of the passenger bridge is connected to a terminal building (8) via a rotunda (9), wherein the outer part of the passenger bridge carries a cabin for connection to the aircraft at a door located thereon, wherein the passenger bridge is made mobile through the agency of a drive means (12) which rests against the hardstanding (15) of the airport through the medium of wheels
10 (13, 14) and which passenger bridge comprises telescopic parts (16-19), **characterised** by locating the drive means (12) at the outer end of the inner part (7) of the passenger bridge (4); by causing the outer part (10) of the passenger bridge to be pivotal in a vertical plane relative to the inner part (7) of the passenger bridge (4); driving the passenger bridge by means of the drive means (12) from a parking position to a
15 docking position subsequent to the aircraft being parked for connection with the passenger bridge (4), wherein said drive means (12) is positioned close to the leading edge of the aircraft wing (6) while telescoping the inner part (7) of said bridge; and by thereafter swinging the outer part (10) of the passenger bridge downwards and telescoping said outer part to an end position in which said cabin (5) can be docked to
20 the aircraft body.
2. A method according to claim 1, **characterised** by causing the inner part (7) of the passenger bridge (4) and the outer part (10) of said bridge to take a vertical position in which the passenger bridge (4) will pass freely over the upper side of the wing (6) prior
25 to the passenger bridge (4) being moved in over the wing of the aircraft and after the passenger bridge has been moved in over said wing (6).
3. A method according to claim 1 or 2, **characterised** by hinging the inner part (7) of the passenger bridge on said rotunda (9) so that said inner bridge part (7) can be swung in a
30 vertical plane; and by causing the vertical position of the inner bridge part (7) to vary with the aid of lifting means (24) at said drive means (12).

4. A method according to claim 1, 2 or 3, **characterised by** hinging the outer bridge part (10) on the inner bridge part (7); and by enabling the vertical position of the outer bridge part (10) to be varied with the aid of force generating means (23) acting between the outer part (17) of the inner bridge part and the inner part (18) of the outer bridge part.
5. An arrangement for connecting the outer end (10) of a passenger bridge (4) to a door located on an aircraft body, wherein the door (A3-A5;A8,A9) is located on one side of the aircraft and sternwards of an aircraft wing (6), wherein the inner part (7) of the passenger bridge is connected to a terminal building (8) via a rotunda (9), wherein the outer part (10) of the passenger bridge (4) carries a cabin (5) intended for connection to the aircraft at an aircraft door, said passenger bridge (4) being made mobile with the aid of a drive means (8) which rests against an airport hardstanding (15) via wheels (13, 14), and wherein the passenger bridge (4) includes telescopic parts (12-15), **characterised in that** the drive means (12) is situated at the outer end of the inner part (7) of the passenger bridge (4); in that the outer part (10) of the bridge can be swung in a vertical plane relative to the inner part (7) of said bridge; in that subsequent to an aircraft being parked for connection to the passenger bridge (4), the drive means (12) functions to drive the passenger bridge (4) from a parking position to a docking position where the drive means (12) is positioned close to the leading edge of the aircraft wing (6) while the inner part (7) of said bridge is telescoped; in that the outer part (10) of the bridge is adapted to be then swung downwards under the influence of a force generating device (23) and is telescoped by drive means to an end position in which the cabin (5) can be docked to the aircraft body.
6. An arrangement according to claim 5, **characterised in that** the inner part (7) of the passenger bridge (4) and the outer part (10) of said bridge are adapted to take a vertical position in which the passenger bridge (4) can pass freely over the upper side of the wing (6) prior to the bridge (4) being moved in over an aircraft wing (6) and after the bridge (4) has been passed in over the wing.

7. An arrangement according to claim 5 or 6, **characterised in that** the inner part (7) of the passenger bridge is hinged to the rotunda (9) so that said inner part (7) can be swung in a vertical plane; and in that the arrangement includes lifting means at the drive means (12) for varying the vertical position of the inner part (7) of the passenger bridge
- 5
8. An arrangement according to claim 5, 6 or 7, **characterised in that** the outer part (10) of the passenger bridge is hinged to the inner part (7) of the bridge; and in that the arrangement includes force generating means (23) which enables the vertical position of the outer part (10) of the bridge to be varied and which acts between the outer part of the inner bridge part (7) and the inner part of the outer bridge part (10).
- 10
9. An arrangement according to claim 5, 6, 7 or 8, **characterised in that** the rotunda (9) is supported by a ground-mounted vertical pillar (25) which includes a lifting device, such as an hydraulic piston-cylinder device, adapted to change the length of the pillar and therewith displace the rotunda (9) in a vertical direction.
- 15